

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

Claims 1-34. (Canceled)

35. (Currently Amended) A plasmid or a recombinant viral vector for *in vitro* or *ex vivo* transgene delivery into mammalian neuronal cells, wherein said vector comprises a chimeric genetic construct comprising a transgene operably linked to at least two distinct posttranscriptional regulatory elements functional in mammalian neuronal cells, ~~each comprising a UTR region of a eukaryotic mRNA selected from one of said~~ posttranscriptional regulatory elements being a tau 3'UTR region, and the other one being a WPRE element, tau 3'UTR, TH3'UTR and APP5'UTR.

36. (Currently Amended) The vector of claim 35, wherein said vector further comprises a UTR region of a eukaryotic mRNA selected from a TH3'UTR and a APP5'UTR region ~~at least one posttranscriptional regulatory element confers increased stability to mRNAs.~~

Claims 37-42. (Canceled)

43. (Previously Presented) The vector of claim 35, wherein said WPRE element comprises SEQ ID NO: 1.

44. (Currently Amended) The vector of claim ~~[[35]]~~36, wherein said APP5'UTR region comprises SEQ ID NO: 2.

45. (Previously Presented) The vector of claim 35, wherein said tau3'UTR region comprises SEQ ID NO: 3.

46. (Currently Amended) The vector of claim ~~[[35]]~~36, wherein said TH3'UTR region comprises SEQ ID NO: 4.

47. (Currently Amended) The vector of claim 35, wherein said vector further comprises a promoter controlling transcription of the transgene in said mammalian neuronal cells.

48. (Previously Presented) The vector of claim 35, wherein said vector further comprises a marker gene.

49. (Previously Presented) The vector of claim 35, wherein said vector further comprises a polyadenylation signal operably linked to said transgene.

Claim 50. (Canceled)

51. (Previously Presented) The vector of claim 35, wherein said vector is selected from a replication-defective adenovirus, a replication-defective adeno-associated virus and a replication-defective retrovirus, including replication-defective lentiviruses.

52. (Previously Presented) The vector of claim 35, wherein the transgene is selected from a transgene coding for a growth factor, a neurotrophic factor, a cytokine, a ligand, a receptor, an immunoglobulin and an enzyme.

53. (Currently Amended) A recombinant mammalian neuronal cell comprising a plasmid or a recombinant viral vector for *in vitro* or *ex vivo* transgene delivery ~~into~~ ~~mammalian cells~~, wherein said vector comprises a chimeric genetic construct comprising a transgene operably linked to at least two distinct posttranscriptional regulatory elements functional in mammalian neuronal cells, one of said

posttranscriptional regulatory elements being a tau 3'UTR region, and the other one being each comprising a UTR region of a eukaryotic mRNA selected from a WPRE element, tau 3'UTR, TH3'UTR and APP5'UTR.

Claims 54-57. (Canceled)

58. (Currently Amended) A method of expressing a transgene in a mammalian neuronal cell *in vitro* or *ex vivo*, the method comprising:

a) providing a plasmid or a recombinant viral vector wherein said vector comprises a chimeric genetic construct comprising a transgene operably linked to at least two distinct posttranscriptional regulatory elements functional in mammalian neuronal cells, one of said posttranscriptional regulatory elements being a tau 3'UTR region, and the other one being each comprising a UTR region of a eukaryotic mRNA selected from a WPRE element, tau 3'UTR, TH3'UTR and APP5'UTR, and

b) introducing said vector into mammalian cells, said introduction causing expression of said transgene in said mammalian cells.

Claims 59-60. (Canceled)

61. (Previously Presented) The method of claim 58, wherein said mammalian cell is a human cell or a rodent cell.

62. (Previously Presented) The method of claim 58, wherein the chimeric genetic construct is introduced into mammalian cells by virus-mediated infection.

63. (Previously Presented) The method of claim 58, wherein the chimeric genetic construct is introduced into cells by plasmid-mediated transfection.

Claims 64-65. (Canceled)

66. (Previously Presented) A method of expressing *in vitro* or *ex vivo* a transgene in neuronal cells, the method comprising:

a) providing a plasmid or a recombinant viral vector comprising a chimeric genetic construct comprising said transgene operably linked to posttranscriptional regulatory elements comprising a WPRE element combined with a APP5'UTR and a tau3'UTR, and

b) introducing said construct into neuronal cells, said introduction causing expression of said transgene in said neuronal cells.

67. (Previously Presented) A method of expressing *in vitro* or *ex vivo* a transgene in neuronal cells, the method comprising:

a) providing a plasmid or a recombinant viral vector comprising a chimeric genetic construct comprising said transgene operably linked to posttranscriptional regulatory elements comprising a WPRE element combined with a APP5'UTR, a tau3'UTR and a TH3'UTR, and

b) introducing said construct into neuronal cells, said introduction causing expression of said transgene in said neuronal cells.

Claims 68-69. (Canceled)

70. (Previously Presented) A method of expressing *in vitro* or *ex vivo* a transgene in neuronal cells, the method comprising:

a) providing a plasmid comprising a chimeric genetic construct comprising said transgene operably linked to posttranscriptional regulatory elements comprising a

WPRE element comprising SEQ ID NO: 1 combined with a APP5'UTR comprising SEQ ID NO: 2 and a tau3'UTR comprising SEQ ID NO: 3, and

b) introducing said plasmid into neuronal cells, said introduction causing expression of said transgene in said neuronal cells.

71. (Previously Presented) A method of expressing *in vitro* or *ex vivo* a transgene in neuronal cells, the method comprising:

a) providing a plasmid comprising a chimeric genetic construct comprising said transgene operably linked to posttranscriptional regulatory elements comprising a WPRE element comprising SEQ ID NO: 1 combined with a APP5'UTR comprising SEQ ID NO: 2, a tau3'UTR comprising SEQ ID NO: 3 and a TH3'UTR comprising SEQ ID NO: 4, and

b) introducing said plasmid into neuronal cells, said introduction causing expression of said transgene in said neuronal cells.